Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) Metal-ceramic high temperature superconductor composite comprising a ceramic ht superconductor (1) bonded to a metal support (2) by a heat conductive bonding agent ~~(3)~~ (6) wherein in the ceramic ht superconductor (1) at least one through hole (5) is provided being in communication to the heat conductive bonding agent (6) at the interface between the metal support (2) and the ceramic ht superconductor (1), wherein further heat conductive bonding agent (6) is provided in the at least one through hole (5) and wherein the heat conductive bonding agent (6) at the interface and the heat conductive bonding agent (6) in the at least one through hole (5) are in contact with each other.

2. (original) Metal-ceramic ht superconductor composite according to claim 1, wherein the at least one through hole (5) has a conical shape with the diameter decreasing toward the metal support (4).

3. (original) Metal-ceramic ht superconductor composite according to claim 1, wherein the bonding between the superconductor (1) and the metal support (4) is selected from a group

consisting of a solder bonding and a bonding by an adhesive system.

4. (currently amended) Metal-ceramic ht superconductor composite according to claim[[s]] 1 wherein the superconductor is a $REBa_2Cu_3O$ type superconductor with RE being Rare Earth Metal selected from Y, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm and Yb.

5. (currently amended) Metal-ceramic ht superconductor composite according to claim 1, wherein the bonding between superconductor (1) and the metal support (4) is a solder bonding and wherein the bottom surface of the superconductor (1) adjacent to the metal support (4) and/or the inner surface of the wall of the trough holes (5) are at least partially metalized with an additional metal layer.

6. (currently amended) Metal-ceramic ht superconductor composite according to claim 1, wherein the superconductor (1) is of REBa.sub.2Cu.sub.3O type having an additional burnt in silver layer at its bottom surface and/or a burnt in silver layer at the inner surface of the wall of the through holes (5).

7. (original) Metal ceramic ht superconductor composite according to claim 1, wherein at least one hole is provided in the surface of the metal support (2) facing the superconductor (1).

8. (original) Metal ceramic ht superconductor composite according to claim 1. wherein at least

one pin is provided on the surface of the metal support (2) projecting into a through hole (5).